DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/Ala Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018160
Date Inspected: 03-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name:	See below	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☐ Yes ☑ No ☐ N/A	**Rod Oven in Use:**	☑ Yes ☐ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☐ Yes ☑ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

OBG Trial Assembly Area
This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

SMAW repair welding of weld joints OBE11B-004, 005 located on PCMK OBG 11AE/11BE, transverse joint, side plate to side plate, south (bikepath) side. Welders were identified as 040320, 040484, 044504. QC was identified as ZPMC QC Liu Hua Jie (QC1). Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR16551 and verbalized by QC1. NDE Report number was displayed on ZPMC Weld Repair Report as NA.

SMAW welding of weld joint SEG068A-044 located on PCMK OBG 11BE, side plate to bottom plate, south (bikepath) side. Welder was identified as 044515. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2214-B-U2-FCM-1 as verbalized to this QA Inspector by QC1.

FCAW welding of weld joint OBE11C-010 located on PCMK OBG 11CE/11DE transverse joint, side plate to side plate, holdback weld at edge plate, south (bikepath) side. Welder was identified as 040367. QC was identified as QC1. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-2233T.

SMAW welding of weld joints SP328-001-051, 053, 055, 057, 059, 061, 063 located on PCMK OBG 11BE/11CE,

side plate T-stiffener web to side plate T-stiffener web, south (bikepath) side, at transverse joint. Welder was identified as 050289. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

SMAW welding of weld joints BP188-001-020, 022, 024, 026, 028, 030 located on PCMK OBG 11CE/11DE at transverse joint, bottom plate T-stiffener web to bottom plate T-stiffener web. Welder weas identified as 500363. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2213-B-U2-FCM-1.

FCAW welding of weld joints BP188-001-043~054 and BP189-001-043~054 located on PCMK OBG 11CE/11DE at transverse joint, bottom plate T-rib web to bottom plate, holdback welds. Welder was identified as 040458. QC was identified as QC1. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-2232-B-U2-FCM-1-F.

SMAW tack welding of weld joint SP783-001-044 located on PCMK OBG 11CW/11DW, side plate T-stiffener web to side plate T-stiffener web, south (crossbeam) side, at transverse joint. Welder was identified as 500409. QC was identified as ZPMC CWI Shi Lei (QC2). Welding variables recorded by QC2 appeared to comply with WPS-B-P-2213-FCM-1.

SMAW welding of weld joint SEG071B-037 located on PCMK OBG 11DW, panel point 104, gusset to floor beam at longitudinal diaphragm, north (counterweight) side. Welder was identified as 062935. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-B-P-2214-TC-U5b-FCM-1.

SMAW repair welding of weld joint OBW11-010 located on PCMK OBG 11BW/11CW, transverse joint, edge plate to edge plate, south (crossbeam) side. Welder was identified as 040656. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR16491 with ZPMC NDE Report #UT-11W-047 and verbalized by QC2.

Heavy Dock
This QA Inspector randomly observed the following on the Heavy Dock:

All 4 towers, lift 4 were positioned on a base pedestal at end of the Heavy Dock. West and north towers, lift 3 and OBG segment 10E were positioned on the deck of the ship moored at the end of the Heavy Dock. OBG CB14 was positioned on the deck of the Heavy Dock. No welding related work was being performed on any of the tower or OBG components. The ZPMC 1600 ton floating crane lifted OBG segment 10W from the seawall area at the head of the Heavy Dock and held it suspended while 2 tugboats moved the crane barge to the outboard side of the ship. See photo below. The OBG segment 10W was still suspended over OBG segment 10E when this QA Inspector departed the area.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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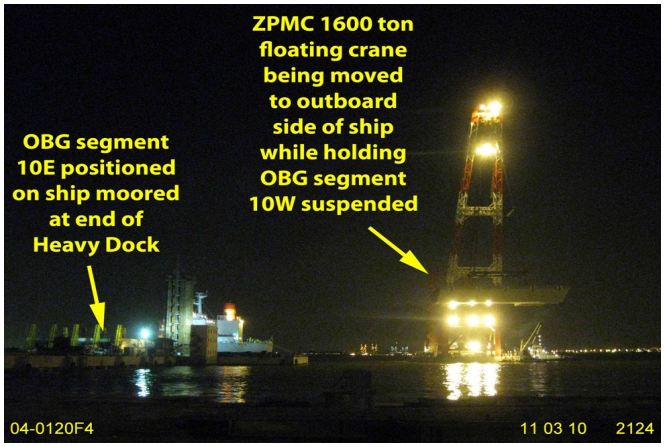

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer